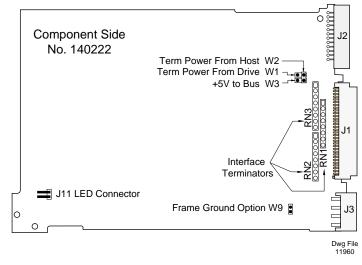
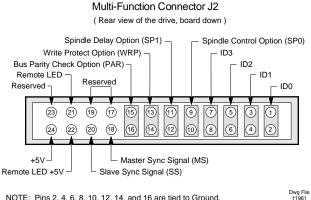
# Micropolis 1991WAV (Wide, Single-Ended) Disk Drive Configuration/Specification Data Sheet

# **Formatted Capacity**

Per Drive	9,091 MB				
Bytes per Sector	512				
Sectors per Track	Variable				
Cylinders	4,477				
AV Data Rate Specifications					
Max. Sustained	6.9 MB/sec				
Min. Sustained	4.1 MB/sec				
Performance Specifications					
Avg. Seek Time (includes read settling time)	12 msec				
Avg. Rotational Latency	5.56 msec				
Rotational Speed	$5,400 \text{ rpm} \pm .05\%$				
Data Transfer Rate at Interface					
Synchronous	20 MB/sec				
Asynchronous	10 MB/sec				
Internal Data Rate	47 - 77 Mbits/sec				
MTBF (power-on hours)	650,000 (Office Environment)				
Positioner	Fully balanced rotary voice coil				
Parking	Automatic park and lock				
General Functional Specifications					
Interface	Fast SCSI-2				
Supports Full Common Command Set	Yes				
Drivers/Receivers	Wide, Single-Ended				
Power Requirements					
+12V ±5% (average)	2.3 A				
$+12V \pm 5\%$ (max during start-up)	4.8 A				
$+5V \pm 5\%$ (average)	1.0 A				
Power Dissipation, typical, idling	30 Watts (102.4 Btu/hr)				
Power Dissipation, typical, seeking	33 Watts (112.6 Btu/hr)				

## **Configuration Option Selection**





NOTE: Pins 2, 4, 6, 8, 10, 12, 14, and 16 are tied to Ground.

### • SCSI ID (ID0, ID1, ID2, ID3)

Up to sixteen devices (the host and fifteen targets) can be attached to the SCSI Bus. These are selected with jumpers on Multi-Function Connector J2.

In multiple-device systems, each device must have its own unique ID. SCSI ID 0 is Default.

SCSI ID	ID3	ID2	ID1	ID0		SCSI ID	ID3	ID2	ID1	ID0
0	-	-	-	-		8	1	-	-	-
1	-	-	-	1		9	1	-	-	1
2	-	-	1	-		10	1	-	1	-
3	-	-	1	1		11	1	-	1	1
4	-	1	-	-		12	1	1	-	-
5	-	1	-	✓		13	1	1	-	1
6	-	1	1	-		14	1	1	1	-
7	-	1	1	✓		15	1	1	1	1
$\checkmark$ = jumper installed										

#### ٠ Interface Termination (RN1, RN2, RN3)

Terminators installed at RN1, RN2, and RN3 (Default) - The drive is terminated.

Terminators omitted - The drive is not terminated.

• Terminator Power (W1, W2, W3)

Jumper installed at W1 (Default) - The drive provides terminator power.

Jumper installed at W2 - The host provides terminator power.

Jumper installed at W3 (Default) - The drive provides terminator power to the SCSI Bus.

#### Frame Ground (W9)

Jumper installed at W9 - Frame ground is connected to logic ground.

Jumper omitted at W9 (Default) - Frame ground is not connected to logic ground.

#### Remote LED

Open-collector output - Used to drive a user-supplied LED to indicate the drive is active.

### • Spindle Control (SP0)

Jumper installed at SP0, jumper omitted at SP1 - The spindle motor starts when the SCSI 'START UNIT' command is received.

Jumpers omitted at SP0 (Default) and at SP1 - The spindle motor starts at power-on.

### • Spindle Delay (SP1)

Jumper installed at SP1, jumper omitted at SP0 - The spindle motor start-up is delayed based on the SCSI ID (12 seconds per SCSI ID).

Jumpers omitted at SP1 (Default) and at SP0 - The spindle motor starts at power-on.

### • Write Protect (WRP)

Jumper installed at WRP - The drive is write protected.

Jumper omitted at WRP (Default) - The drive is not write protected.

### • **BUS Parity Check** (PAR)

Jumper installed at PAR - The drive neither generates nor detects parity.

Jumper omitted at PAR (Default) - The drive generates parity and has parity detection enabled.

### • Spindle Synchronization

Use of the MS and SS signals is optional.

These signals are used as spindle synchronization reference.